

Michelle Lujan Grisham Governor

Howie C. Morales
Lt. Governor

NEW MEXICO ENVIRONMENT DEPARTMENT

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James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

Certified Mail-Return Receipt Requested

May 10, 2019

The Honorable Telesfor "Ted" Benavidez, Mayor Post Office Box 337 Pecos, New Mexico 87552

RE: Village of Pecos Wastewater Treatment Facility; Minor Facility; NPDES Permit No. NM0029041; NPDES Compliance Evaluation Inspection; April 25, 2019

Dear Honorable Mayor Benavidez:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U. S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with the requirements of the federal Clean Water Act.

Further explanations are provided with the check list and discuss issues that should be addressed. The introduction and treatment scheme are also included with this inspection report.

You are encouraged to review the inspection report, required to correct any issues noted during the inspection, and advised to modify your operation and/or administrative procedures as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing USEPA and NMED regarding modifications and compliance schedules at the address below:

David Long, NPDES Enforcement Coordinator Environmental Protection Agency, Region 6 NPDES Enforcement Branch (6EN-WM 1445 Ross Avenue, Suite 1200 Dallas, Texas 75202-2733 Sarah Holcomb, Program Manager New Mexico Environment Dept. Surface Water Quality Bureau Point Source Regulation Section PO Box 5469 Santa Fe, New Mexico 87502 Village of Pecos WWTP March 10, 2019 Page -2-

David Long (<u>Long.David@epa.gov</u>) is USEPA Region 6's NPDES Enforcement Coordinator at the above address. If you have any questions about this inspection report, please contact Sandra Gabaldon at 505-827-1041 or <u>Sandra.gabaldon@state.nm.us</u>

Sincerely,

/s/ Sarah Holcomb

Sarah Holcomb, Program Manager Point Source Regulation Section Surface Water Quality Bureau

Cc: Carol Peters-Wagnon, USEPA (6EN-WM via email David Long, USEPA (6EN-WM) via email Nancy Williams, USEPA (6EN-WC) via email Amy Andrews, USEPA (6EN-WM) via email David Esparza, USEPA (6EN-WM) via email Brent Larson, USEPA (6WQ-PP) via email Robert Italiano, NMED District II via email New Mexico Environment Department, GWQB

Leonard Quintana, via email

Form Approved OMB No. 2040-0003 Approval Expires 7-31-85



NPDES Compliance Inspection Report

	Section A: National Data System Coding																														
Transaction Code NPDES yr/mo/day Ins										spec. T	pec. Type Inspector Fac Type				Fac Type																
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	Section B: Facility Data																														
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				ment	QA R	eviewe	er						Agency/Office/Phone and Fax Numbers							Dat	Date										
	/s/ Sarah Holcomb Sarah Holcomb, Program Manager							NI	MED/S	wQB/	(505	5) 82	7-059	6/(50	5) 827	-0160					May 10, 2019										

VILLAGE OF PECOS	PERMIT NO. NM0029041
SECTION A – PERMIT VERIFICATION	
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS DETAILS: S	EXPLANATION ATTACHED <u>NO</u>)
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	⊠y□n □nA
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES	□ y □ n ⊠ na
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT	⊠ y □ n □ na
4. ALL DISCHARGES ARE PERMITTED	⊠ y □ n □ na
SECTION B – RECORDKEEPING AND REPORTING EVALUATION	
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. S M U NA (FURTHER DETAILS:	EXPLANATION ATTACHED <u>NO</u>)
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.	□y ⊠ n □ na
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.	⊠s □ m □ u □ na
a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING	⊠ y □ n □ na
b) NAME OF INDIVIDUAL PERFORMING SAMPLING	⊠ y □ n □ na
c) ANALYTICAL METHODS AND TECHNIQUES.	⊠ y □ n □ na
d) RESULTS OF ANALYSES AND CALIBRATIONS.	⊠ y □ n □ na
e) DATES AND TIMES OF ANALYSES.	⊠ y □ n □ na
f) NAME OF PERSON(S) PERFORMING ANALYSES.	⊠ y □ n □ na
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.	⊠s □m □u □na
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.	□s ⋈ m □ u □ na
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.	□ y ⊠ n □ na
SECTION C – OPERATIONS AND MAINTENANCE	
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. S M U NA (FURTHER DETAILS:	EXPLANATION ATTACHED <u>YES)</u>
1. TREATMENT UNITS PROPERLY OPERATED.	⊠s □m □u □na
2. TREATMENT UNITS PROPERLY MAINTAINED.	⊠s □ m □u □ na
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.	⊠s □m □u □na
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.	⊠s □m □u □na
5. ALL NEEDED TREATMENT UNITS IN SERVICE	⊠s □ m □ u □ NA
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.	⊠s □m □u □na
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.	⊠s □ m □ u □ na
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.	⊠y □n □na
STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.	⊠y□n □na □y⊠n □na

VILLAGE OF PECOS	PERMIT NO. NM0029041
SECTION C – OPERATIONS AND MAINTENANCE (CONT'D)	
9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?	□ y ⊠ n □ na □ y □ n ⊠ na □y □ n ⊠ na
10.HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT? IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?	□y⊠n □na □y□n ⊠na
SECTION D – SELF-MONITORING	
PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. S	ANATION ATTACHED <u>NO</u>).
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.	\boxtimes Y \square N \square NA
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.	⊠ y □ n □ nA
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.	\boxtimes Y \square N \square NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.	⊠ y □ n □ na
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.	⊠y □ n □ na
6. SAMPLE COLLECTION PROCEDURES ADEQUATE	⊠ y □ n □ na
a) SAMPLES REFRIGERATED DURING COMPOSITING.	⊠ y □ n □ na
b) PROPER PRESERVATION TECHNIQUES USED.	⊠ y □ n □ na
c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.	⊠ y □ n □ na
7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?	□ y □ n ⋈ na
SECTION E – FLOW MEASUREMENT	
PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. □ S □ M ☒ U □ NA (FURTHER EXPLADETAILS:	NATION ATTACHED <u>YES</u>)
PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. TYPE OF DEVICE: Closed pipe with magmeter	⊠y □ n □ na
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.	⊠ y □ n □ na
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.	□ y □ N ⋈ NA
4. CALIBRATION FREQUENCY ADEQUATE. RECORDS MAINTAINED OF CALIBRATION PROCEDURES. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.	$\begin{array}{c} \square_{Y} \boxtimes_{N} \square \text{ NA} \\ \square_{Y} \boxtimes_{N} \square \text{ NA} \\ \square_{Y} \boxtimes_{N} \square \text{ NA} \end{array}$
5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE. Closed pipe with mag m	eter.
6. HEAD MEASURED AT PROPER LOCATION.	□ y □ N 図 NA
7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.	⊠ y □ n □ na
SECTION F – LABORATORY	
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. S S M U NA (FURTHER EXPLA	NATION ATTACHED <u>NO</u>
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)	⊠ y □ n □ na

	PERMIT NO. NM0029041										
SECTION F - LABORATORY (CONT'D)											
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED											
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.											
4. QUALITY CONTR	4. QUALITY CONTROL PROCEDURES ADEQUATE.										
5. DUPLICATE SAM	5. DUPLICATE SAMPLES ARE ANALYZED. <u>10</u> % OF THE TIME. ☑ Y ☐ N ☐ NA										
6. SPIKED SAMPLES	6. SPIKED SAMPLES ARE ANALYZED % OF THE TIME.										
7. COMMERCIAL LA	ABORATORY USED.					⊠ y □ n □	□ NA				
LAB NAME	Hall Environmental Ana	alysis Laboratory, Inc.		I	Bio Aquatic Testing						
LAB ADDRESS	4901 Hawkins St., NE;	Albuquerque, NM 87109)	<u> </u>	2501 Mayes Road, #100; C	Carrollton, TX 75006					
PARAMETERS PER	RFORMED Biochemical	Oxygen Demand, TSS, E	. coli	,	WET (biomonitoring)						
SECTION G - EFI	FLUENT/RECEIVIN	G WATERS OBSER	VATIONS. □	s⊠m□u□nA	↑ (FURTHER EXPLANATION	ATTACHED <u>NO</u>).					
OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER				
001	NONE	NONE	NONE	NONE	NONE	CLEAR					
RECEIVING WATER	OBSERVATIONS <u>Sp</u>	ring runoff is occurring an	d the flow is high. There	is some turbidity, no foam	, no grease from the dischar	ge outfall 001.					
SECTION H - SLU	JDGE DISPOSAL										
SLUDGE DISPOSAL DETAILS:	. MEETS PERMIT REQU	JIREMENTS.		Is □ M ⊠ U □ NA	A (FURTHER EXPLANATIO!	N ATTACHED <u>YES</u>).					
1. SLUDGE MANAC	GEMENT ADEQUATE TO	O MAINTAIN EFFLUEN	T QUALITY.				□na				
2. SLUDGE RECOR	DS MAINTAINED AS RI	EQUIRED BY 40 CFR 50	03.			□s □ m 図 U □ NA					
3. FOR LAND APPL	IED SLUDGE, TYPE OF	LAND APPLIED TO: N	V/A (e.g., FOREST, AC	GRICULTURAL, PUBLIC	C CONTACT SITE)						
SECTION I - SAN	MPLING INSPECTION	ON PROCEDURES	(FURTHER EXPLANATIO	N ATTACHED).							
1. SAMPLES OBTAI	NED THIS INSPECTION	I.				\square Y \square N \square	X NA				
2. TYPE OF SAMPLE	E OBTAINED										
GRAB COMPOSITE SAMPLE METHOD FREQUENCY											
3. SAMPLES PRESE	3. SAMPLES PRESERVED.										
4. FLOW PROPORT	4. FLOW PROPORTIONED SAMPLES OBTAINED.										
5. SAMPLE OBTAIN	NED FROM FACILITY'S	SAMPLING DEVICE.				□ү□п[□ NA				
6. SAMPLE REPRES	SENTATIVE OF VOLUM	E AND MATURE OF DI	ISCHARGE.			\square Y \square N [□ NA				
7. SAMPLE SPLIT W	/ITH PERMITTEE.					□ y □ n [□ NA				
8. CHAIN-OF-CUST	ODY PROCEDURES EM	IPLOYED.				□ y □ n [□ NA				
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.											

VILLAGE OF PECOS

NPDES PERMIT #NM0029041

COMPLIANCE EVALUATION INSPECTION

DATE OF INSPECTION: APRIL 25, 2019

INTRODUCTION:

A Compliance Evaluation Inspection (CEI) was conducted at the Village of Pecos Wastewater Treatment Plant (WWTP) on April 25, 2019 by Sandra Gabaldón and Daniel Valenta of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). This facility is classified as a minor discharger under the federal Clean Water Act (CWA), Section 402. This facility is regulated under the National Pollutant Discharge Elimination System (NPDES) permit program and is assigned NPDES permit number NM0029041. The facility design flow is 0.25 million gallons per day (MGD).

The Village of Pecos WWTP discharges into the Pecos River at Latitude N35°34′01.7″, Longitude W - 105°4′20.6′ in Segment 20.6.4.217 of the Pecos River Basin. This segment, as classified under the *Standards* for *Interstate and Intrastate Surface Water 20.6.4 NMAC*, has designated uses of: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the main stem of the Pecos River.

The inspectors arrived at the Village of Pecos WWTP at 1030 hours and conducted an entrance interview with Mr. Leonard Quintana, Level IV Operator. The inspectors made introductions, presented credentials, and discussed the purpose of the inspection with Mr. Quintana. An exit interview to discuss preliminary findings of the inspection was conducted with Mr. Quintana at the Pecos Wastewater Treatment Plant.

The NMED performs a specific number of CEI's annually for the United States Environmental Protection Agency (USEPA). The purpose of this inspection is to provide the USEPA with information to evaluate the permittee's compliance with their NPDES permit. The enclosed inspection report is based on verbal information supplied by the permittee's representatives, observations made by the NMED inspector, and a review of records maintained by the permittee, commercial laboratories, and/or NMED. Findings of the inspection are detailed on the attached EPA form 3560-3 and in the narrative Further Explanations section of the report.

TREATMENT SCHEME:

The Village of Pecos serves a population of approximately 1,000 people. The WWTP is a Sequencing Batch Reactor (SBR). Raw wastewater enters the plant through a three-inch Parshall Flume. A Vulcan Filter Stair Screen then removes debris by moving the debris upward by rotating the screen upwards; slowly moving the debris to the next level. Once the debris reaches the top step, it is discharged to a trash receptacle for later disposal.

The influent is gravity fed to the two SBR basins by a splitter pipe which can be manually closed and opened to allow influent to either basin. In the SBR, wastewater goes through three phases of treatment. These include: react, settle and decant.

During the react phase, the wastewater undergoes 168 minutes of alternate periods of anoxic mix and aeration. In the settle phase, the aerators are stopped, which allows the solids to settle out and move to the bottom. This allows the clear wastewater to stay on top. Then, the decant phase starts and the decanter removes clarified supernatant to the ultraviolet system for final disinfection. The effluent is measured by an enclosed Sparling Magnetic Flow Meter.

SLUDGE:

Waste activated sludge is wasted to the aerated sludge digester. The thickened sludge is sent from the digester to the sludge drying beds where they can be dewatered. The solids are then stored onsite.

The solids have been stored on site since the facility went into operation (greater than two years).

Further Explanations:

Note: The sections are arranged according to the format of the enclosed EPA Inspection Checklist (Form 3560-3), rather than being ranked in order of importance.

<u>Section C – Operation and Maintenance – Overall Rating of "Marginal"</u>

Permit requires in Part III, Section B.3 Proper Operation and Maintenance:

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets or discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.
- b. The permittee shall provide adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

<u>Findings</u> for Operation and Maintenance:

The permittee has one certified operator employed. It is imperative that another certified operator be employed and able to run the facility in an efficient manner in the event that the primary operator in unavailable. The current operator plans on retiring in approximately two years.

The permittee has a Groundwater Permit from the Department of Environment to cover the lagoons, which should be decommissioned. The permittee was required to do so by December 1, 2015. The lagoons are still intact at this point. The permittee needs to address this as soon as possible and come into compliance with the Groundwater requirements.

The facility has no written emergency plan in place. At all times, the facility should follow safe operating procedures. Employees must be trained in emergency shut-down, fire control, and spill response procedures, as well as in the use of safety equipment, safe sampling techniques, and safe handling of chemicals and wastes. Occupational Safety and Health Administration (OSHA) provides Right-to-Know laws regarding potentially dangerous chemicals in the workplace. This law specifically requires a written hazard communication program, labeling of chemicals, and the availability of material safety data sheets to employees upon request.

Section E – Flow Measurement – Overall Rating of "Unsatisfactory"

Permit requires in Part III, C.6 Flow measurement:

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed,

calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

<u>Findings</u> for Flow measurement:

The permittee has failed to calibrate their mag meter to insure the device is measuring flow with a maximum deviation of less than 10% from true discharge rates.

Magnetic flowmeters function on the principle of Faraday's Law which states that a conductor moving through a magnetic field will generate a voltage that is proportional to the speed of the conductor. This relationship is described by the following equation:

E = k * B * D * V

Where:

E = The induced voltage generated

k = A unit conversion constant

B = The Magnetic Field Strength

D = The distance between the probes picking up the

induced voltage

V = The velocity of the conductor

With magnetic flowmeters, the conductor is the fluid that is passing through the sensor and D becomes the distance between the measurement electrodes which will always be a fixed distance. This means that the relationship between E and B and V needs to be established. This is done through the calibration process which is performed on the magnetic sensor. The calibration process determines a calibration number that is unique to every sensor. This calibration number then describes the relationship between the velocity (V) and the induced voltage (E).

With this, Faraday's equation can be re-written as:

E = C * V

Where:

C = Calibration constant = k * B * D

k and D are fixed which means that the only variable that will result in a change in the calibration constant is a change in the magnetic field. Since there are no moving parts to a magnetic flowmeter, and the coil windings and coil current are constant if the meter if functioning correctly, B should not change over time. By taking baseline measurements of some basic parameters that describe the magnetic field strength (B) during the calibration process, a factory reference point to the magnetic field strength at the time of calibration for that sensor is established. By comparing measured values taken during the meter verification process to the established baseline parameters and checking for deviations it can be determined if the sensor calibration has shifted and corrective action needs to be taken.

With the above information, the facility should be able to find an outside contractor that has the ability to check the flow calibration on, at least, an annual basis.

The mag meter is located in a confined space, and the operator is not certified to enter a confined space. This is a situation in which the ultraviolet system and mag meter were placed in an area which is not accessible to the operator. This presents a substantial problem for the facility.

<u>Section G – Effluent/Receiving Waters Observations – Overall Rating of "Marginal"</u>

The permit requires in Part I, Section A. Effluent Limitations and Monitoring Requirements:

Effluent Characteristics		Discharge L	Monitoring Requirements			
	unless c	lbs/day, otherwise	(mg/l,	unless	Frequency	Sample Type
	30-Day Avg.	cified) 7-Day Avg.	30-Day Avg.	rwise 7-Day Avg.		
Flow	N/A	N/A	Report (MGD)	Report (MGD)	Daily	Instantaneous
Biochemical Oxygen Demand (BOD5)	38	56	30	45	2/Month	8-hr composite
Total Suspended Solids (TSS)	38	56	30	45	2/Month	8-hr composite
BOD5 % Removal ⁽¹⁾	85%	N/A	N/A	N/A	2/Month	Calculation
TSS % Removal ⁽¹⁾	85%	N/A	N/A	N/A	2/Month	Calculation
Total Residual Chlorine ⁽²⁾ (TRC)	N/A	N/A	0.019 (Instantaneous Max)		Daily	Grab
E. coli (colonies/100 ml)	N/A	N/A	126	23 5	2/Month	Grab
рН	N/A	N/A	6.6 s.u. 8.8 Minimum s.u.		Daily	Grab

Findings for Self-Monitoring:

According to the data reported from Hall Environmental Analysis Laboratory, Inc., contract laboratory, the E. coli results were < 1 for the month of August 2018. The permittee should report the results as < 1 rather than reporting the results as = 1".

DISCHARGE MONITORING REPORT CALCULATION CHECK

AUGUST 2018

E. Coli

Sample Dates:	08/08/2018	08/22/2018	Data reported on DMR
E. coli (#100ml)	<1	<1	
Daily Max		· · · · · ·	1.0
30-day Average: Log of colonies per 100	Log (1) + log (1) = 0	10.0*
mL Add all logs and divide	0 + 0= 0 / 2		
by number of samples. Geometric Mean is antilog.	Antilog 0 = 1		

^{*}Does not match what was reported on DMR

BOD

Sample Date:	Daily Flow (MGD)	BOD (mg/l)	Calculated Daily Load				
08/08/2018	(133 Inst. GPM = 0.192	2.0	0.192 x 2.0 x 8.34 = 3.20 lbs/d				
	MGD)						
08/21/2018	(118 Inst. GPM = 0.170	3.0	0.170 x 3.0 x 8.34 = 4.25 lbs/d**				
	MGD)						
GPM x 1440 min/d / 1,000,00	0 = MGD						
			% Removal = (Inflow Conc. –				
			Effluent Conc.) / Inflow Conc.				
08/08/2018 – INFLUENT		730	(730– 2) / 730 (100) = 99%				
08/22/2018 – INFLUENT		580	(580 – 3.0) / 580(100) = 99%				
Calculated Monthly	3.2 lbs/d + 4.25 lbs/d = 7.45 lbs/d / 2 = 3.73 lbs/d**						
Average (Loading):							
Calculated Monthly	2.0 mg/L + 3.0 mg/L = 5.0 mg/L / 2 = 2.5 mg/L						
Average (Conc.):							
Reported on DMR	3.4 lbs/d 30-D Avg.; 4.3 lbs/d 7-D Avg.						
	2.5 mg/L 30-D Avg.; 3.0 mg/L 7-D Avg.						

DOES NOT MATCH WHAT WAS REPORTED ON eDMR

Sample Date:	Daily Flow (MGD)	TSS (mg/l)	Calculated Daily Load							
08/08/2018	(133 Inst. GPM =	4.0mg/L	0.192 x 4.0 x 8.34 = 6.41 lbs/d**							
	0.192 MGD)									
08/21/2018	(118 Inst. GPM =	4.0 mg/L	0.170 x 4.0 x 8.34 = 5.67 lbs/d							
	0.170 MGD)									
GPM x 1440 min/d / 1,00	GPM x 1440 min/d / 1,000,000 = MGD									
			% Removal = (Inflow Conc. – Effluent Conc.) /							
			Inflow Conc.							
08/08/2018 -		430	(430 – 4) / 430(100) = 99%							
INFLUENT										
08/21/2018 –		200	(200 – 4) / 200(100) = 98%							
INFLUENT										
Calculated Monthly	6.41 + 5.67 = 12.08 / 2 = 6.04 lbs/d**									
Average (Loading):										
Calculated Monthly	4.0 + 4.0= 8.0.0 / 2 = 4.0 mg/L									
Average (Conc.)										
Reported on DMR	5.3 lbs/d 30-D avg.;	avg.								
4.0 mg/L 30-D avg.; 4.0 mg/L 7-D avg.										

^{**} DOES NOT MATCH WHAT WAS REPORTED ON eDMR

Section H - Sludge Disposal - Overall Rating of "Unsatisfactory"

The permit requires in Part IV, Section 1.A General Requirements:

The permittee shall handle and dispose of sewage sludge in accordance with Section 405 of the Clean Water Act and all other applicable Federal regulations to protect public health and the environment from any unreasonably anticipated adverse effects due to any toxic pollutants which may be present in the sludge.

PART 503—STANDARDS FOR THE USE OR DISPOSAL OF SEWAGE SLUDGE

Subpart A—General Provisions

§ 503.1 Purpose and applicability.

(a) Purpose.

(1) This part establishes standards, which consist of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a treatment works. Standards are included in this part for sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are pathogen and alternative vector attraction reduction requirements for sewage sludge applied to the land or placed on a surface disposal site.

- (2) In addition, the standards in this part include the frequency of monitoring and recordkeeping requirements when sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are reporting requirements for Class I sludge management facilities, publicly owned treatment works (POTWs) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more.
- (b) Applicability.
- (1) **This part applies to any person who prepares sewage sludge**, applies sewage sludge to the land, or fires sewage sludge in a sewage sludge incinerator and to the owner/operator of a surface disposal site.
- (2) This part applies to sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.
- (3) This part applies to the exit gas from a sewage sludge incinerator stack.
- (4) This part applies to land where sewage sludge is applied, to a surface disposal site, and to a sewage sludge incinerator.

Definitions:

(y) Store or storage of sewage sludge is the placement of sewage sludge on land on which the **sewage sludge remains for two years or less.** This does not include the placement of sewage sludge on land for treatment.

<u>Findings</u> for Sludge Disposal:

The permittee has stockpiled sludge for longer than two years onsite, therefore becoming a storage site for sludge. This is unacceptable practice and the permittee needs to test and remove the sludge or apply for a sludge only permit.